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ABSTRACT

The Math English Science Technology Education Project (MESTEP) was established to recruit, select, prepare, support, and retain in teaching diverse and talented recent college graduates with strong academic majors in math, English, or a science. A collaborative partnership of the University of Massachusetts (Amherst), public schools, and private industry, MESTEP is a 15-month Master of Education program comprised of 3.5 weeks of intensive education course work at the University of Massachusetts followed by student teaching in a high school summer session in conjunction with mentors and university supervisors. Completion of the first summer prepares the students to move into a teaching or an industry internship. During the first 3 years of teaching, participating companies are committed to attempt to hire MESTEP graduates for summer employment. Much of the document consists of lists of names of participants, including information on their school and employment, and lists of names of directors and others involved in the program.
 (JD)

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M E S T E P

THE MESTEP RECORD:

A REPORT ON THE FIRST SIX YEARS

MATH ENGLISH SCIENCE

TECHNOLOGY EDUCATION

PROJECT

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Math English Science
Technology Education Project
(MESTEP)

To the Reader:

This report is dedicated to the diverse, talented and caring young men and women who have elected and been selected to be a part of MESTEP. It is also dedicated to the school, University, and corporate people who have come together to offer and support a program which is distinguished, demanding, and meeting the need to attract and prepare compelling people for the important work of teaching.

It is too easy to forget the significant contributions and work of many in this effort over the first years. I hope that this report will serve as a reminder and inspiration as we move ahead.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard J. Clark".

Richard J. Clark
Director, MESTEP

RJC/nt

TABLE OF CONTENTS

I. MESTEP	
Introduction	4
Profile of MESTEP Students	5
Summary of Graduate Employment	6
Graduate Status as of September, 1988	7
Program Design	16
II. Partnership Participants	
The MESTEP Partnership	20
Planning Board Members	21
Faculty	26
Staff	27
Mentors	28
Support Teachers	29
Supervisors	31
School Internship Sites	32
Industry Internship Sites	33
Graduate Employers	34
III. Recognition and Publicity	
Recognition	37
Professional Presentations	37
Articles	37
IV. Research and Evaluation	43
V. Fiscal Information	45

M E S T E P

Introduction

Profile of Students, 1984-1989

Summary of Graduate Employment

Graduates' Status as of September, 1988

Program Design

INTRODUCTION

The central goal of the MESTEP Partnership is to recruit, prepare, place, and retain in teaching diverse, talented college graduates with majors in math, English, or a science.

Each year a heavy investment in recruiting produces more than 1,000 inquiries and 100 formal applications. From these applications, 30 are invited to school-industry interviews and 20-25 are selected to participate.

Special priority is given to minority recruitment. This has resulted in at least a 20 percent minority representation in each of the past three years.

All candidates successfully complete the M.Ed. program and more than 80 percent enter teaching. Currently 87 of the 123 MESTEP candidates and graduates are employed as teachers.

The following section is a status report on all students and graduates.

PROFILE OF MESTEP STUDENTS
Class of 1984-1989

n = 123

Women	75
Men	48
Minority	23%
Biology	20
Chemistry	14
General Science	14
Physics	17
Math	47
English	11
Average GPA	3.3
Average GRE	631

SUMMARY OF GRADUATE EMPLOYMENT
n=100

	<u>Teaching</u>	<u>Educ. Related</u>	<u>Other</u>
Class of '84	9	4	4
Class of '85	14	7	3
Class of '86	11	3	2
Class of '87	18	4	0
Class of '88	18	2	1
Total	70	20	10

Teaching: 41 in state

29 out of state

10 other than K-12 settings

Ed-Related: 10 Further graduate study

Other: 5 Working for MESTEP-related companies

MESTEP CLASS OF 1984

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
Joel Blackmer (Vermont, '82)	Gifford Alternative HS	Gifford Alternative HS	Full Circle Alternative HS
Kenneth Cole (UMASS, '83)	Newburyport Public Schools	DEC	Newburyport Public Schools
Richard Earls (Holy Cross, '78)	Amesbury Public Schools	DEC	Tech. Specialist Perkin Elmer, CT
Beth Gordon (Penn State, '80)	Wayland Public Schools	DEC	West Covina High School, CA
Beth Jackman (Clarkson, '83)	Amesbury Public Schools	DEC	EIC Labs, MA
Joyce Kelly (MIT, '83)	Acton-Boxborough Regional Schools	DEC	Acton-Boxborough Regional Schools
Wook Lee (Harvard, '83)	Acton-Boxborough Regional Schools	DEC	DEC
Margaret Longo (Eliz'town, '83)	Acton-Boxborough Regional Schools	DEC	HS Principal, Caroline Islands, Micronesia
Marie Scavotto (Smith, '81)	Acton-Boxborough Regional Schools	DEC	Mass Mutual Insurance Company
Kevin Schoen (Worcester, '82)	Weston Public Schools	DEC	Master's program Computer Science
Kristi Thompson (WPI, '81)	Dudley-Charlton Regional Schools	Dudley-Charlton Regional Schools	Wkg in Industry in CT
Sosi Toomajanian (Wellesley, '82)	Springfield Public Schools	DEC	DEC
Ellen Walen (Smith, '82)	Brookline Public Schools	DEC	Brookline Public Schools

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
Kenneth Weinstein (Tufts, '82)	Newburyport Public Schools	DEC	Tufts Univ. (Coach)
Ann Wenner (Mansfield, '83)	Newburyport Public Schools	Newburyport Public Schools	Newburyport Public Schools
James Werner (U of Lowell, '83)	Lynnfield Public Schools	DEC	Tewksbury, tchg com- puters in private sector
Paula Williams (Wellesley, '83)	Amherst-Pelham Regional Schools	DEC	Teaching at the Am. School, Netherlands

MESTEP CLASS OF 1985

Jane Bjork (Elms, '84)	Mohawk Trail Regional Schools	DEC	Mohawk Trail Reg. Schools
Victoria Borden- Munoz (UMass, '83)	Lawrence Public Schools	DEC	PhD program Harvard Univ.
Michael Boss (Vassar, '80)	Framingham Public Schools	DEC	Science Museum, SF, CA
Rodney Bowers (Hampton, '84)	Lawrence Public Schools	DEC	Lawrence Public Schools
Beth Brairman (Tufts, '78)	Easton Public Schools	DEC	Easton Public Schools
Carl Britton (Hampshire, '83)	Nashoba Regional Schools	DE.	Maple Valley School Wendell, MA
Deborah Cliff (Middlebury, '84)	Nashoba Regional Schools	DEC	Heritage Public Schools, VA
Michael Conwill (MIT, '84)	Brookline Public Schools	DEC	New England Life, MA
Judith Dorfman (Smith, '84)	Longmeadow Public Schools	DEC	Silver Creek Public Schs, CA
Stephen Greaney (Stanford, '84)	Amherst-Pelham Regional Schools	Amherst-Pelham Regional Schools	DEC

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
Lorraine Grosslight (UMASS, '84)	Winchester Public Schools	DEC	Ed Tech Center, MA
Christopher Haven (Berkeley, '84)	Triton Regional Schools	DEC	Reading Public Schools
Carol Hirst (Fitchburg, '83)	Quabbin Regional Schools	DEC	Catholic Sch, Central Maine
Lanelle Jalowiec (Mt. Holyoke, '79)	Longmeadow Public School	DEC	DEC
James Kirby (Trinity, '84)	Quabbin Regional Schools	DEC	PhD prog George Washington Univ
Alice Kyburg (Rochester, '84)	Concord-Carlisle Public Schools	DEC	PhD program, U of Rochester
Christine McDonald (UMASS, '79)	Triton Regional Schools	DEC	Teaching on Cape Cod, MA
Brian McGrath (UMASS, '84)	Pentucket Regional Schools	DEC	Seminary Student, MA
Janet Snow (Allegheny, '84)	Winchester Public Schools	DEC	Lawrence Acad. Groton, MA
Margaret Stanne (UMASS, '84)	Winchester Public Schools	DEC	Houghton-Mifflin
Brian Telfair (Va. State '83)	Pentucket Regional Schools	DEC	Adult Career Dev Ctr Richmond, VA
Charles Tinschert (New Eng Co, '84)	Nashoba Regional Schools	DEC	Nashoba Reg. Schools
Julia Tuchler (Bryn Mawr, '84)	Acton-Boxborough Regional Schools	DEC	Manhattan Ctr for Math and Science, NY
Krista Walters (St. Mary's, '84)	Acton-Boxborough Regional School	DEC	Homemaker, TX

MESTEP CLASS OF 1986

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
Gail Anderson (WPI, '85)	Quabbin Regional Schools	Data General	Scituate Public Schools
Melanie Andrews (Wheaton, '85)	Lawrence Public Schools	DEC	Galway Public Schools, NY
Peter Atlas (Oberlin, '83)	Lawrence Public Schools	DEC	Concord-Carlisle Reg. HS
Dolores Bennett (Salem State, '85)	Harvard Public Schools	Bank of Boston	Harvard Public Schools
Geoffrey Blate (Rochester, '84)	St. Gregory High School	DEC	Brockton Public Schools
Melvin Figueroa (UMASS, '83)	Springfield Public Schools	Springfield Public Schools	DYS, Springfield Looking for tchg position
Mary Katein (Trinity, '85)	Holy Name High School	New England Telephone	Falls Church Pub. Schools, VA
Paul Kuzeja (Amherst, '80)	Springfield Public Schools	Springfield Public School	Mechanic
Douglas Lansing (Clarkson, '85)	Lawrence Public Schools	DEC	Proprietor Lake Shore Deli, NY
Lillian Larsen (Wheaton, IL '83)	Lawrence Public Schools	Houghton- Mifflin	Maywood Public Schools, IL
Catherine McDonagh (Elms, '85)	Nashoba Regional Schools	DEC	Nashoba Reg. Schools
David Moyer (Lebanon Valley, '83)	Quabbin Regional Schools	Spinnaker	Prince Frederick Pub Sch, MD
Pamela Pierce (Amherst, '85)	Harvard Public Schools	Bank of Boston	Grad Student Syracuse Univ.

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
Karen Poulin (Vermont, '82)	Lawrence Public Schools	Houghton- Mifflin	Grad Student Oregon St. U.
Tracy Psaute (UMASS, '85)	Murdoch Public Schools	Murdoch Public Schools	Caring for son, tchg night school, MA
Joanne Robinson (Bowdoin, '81)	Norwell Public Schools	Norwell Public Schools	Brookline Public School

MESTEP CLASS OF 1987

Sharyn Bankert (UMASS, '86)	Hopkinton Public Schools	DEC	Hopkinton Public Schools
Theresa Bastian (Marist, '85)	Franklin Public Schools	Bank of Boston	Our Lady of Loures HS, NY
Louisa Benavidez (Sul Ross St, '85)	Lawrence Public Schools	Hewlett- Packard	Brownsville Pub Schs, TX
Regina Blakely (DePaul, '85)	Lawrence Public Schools	New England Telephone	Lawrence Public Schools
Anne Boy (UNH, '78)	Lawrence Public Schools	Houghton- Mifflin	Turners Falls Public Schools
Scott Carlson (Wittenberg, 85)	Lawrence Public Schools	DEC	Gloucester Public Schools
George Cheevers (Harvard, '81)	Boston Public Schools	DEC	Boston Public Schools
Jean Chong (McGill, '84)	Hopkinton Public Schools	DEC	Grad Asst, SUNY Stony Brook, NY
Peggy Collins (Swarthmore, '79)	Lawrence Public Schools	Houghton- Mifflin	Oxford Public Schools
John de la Torre (San Carlos, '79)	Gloucester Public Schools	DEC	Looking for tchg position

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
Bert Engvall (UMASS, '81)	Marlborough Public Schools	IGS-GM	Middlesex Comm. College
Mary Groeninger (Virginia, '85)	Lawrence Public Schools	New England Telephone	Grad Student
Gita Hakerem (Rochester, '86)	Gloucester Public Schools	DEC	Framingham Public Schools
Christine Halloran (Elms, '86)	Franklin Public Schools	DEC	Amherst-Pelham Regional Schs
Mark Hiza (UCONN, '80)	Marlborough Public Schools	IGS-GM	The Hill Sch, Pottstown, PA
Wendy Iannacone (St. John's, '82)	Norwell Public Schools	Norwell Public Schools	Computerland, Santa Fe, NM
Myra Margulis (Syracuse, '86)	Lawrence Public Schools	Cullinet	Vernon Public Schools, CT
Deneen McBean (Clark, '86)	Lawrence Public Schools	DEC	Counselor, Clark College
Karl Mundi (Muhlenberg, 86)	Franklin Public Schools	DEC	Lenape Valley HS, NJ
Scott Prescott (Dartmouth, '86)	Franklin Public Schools	Spinnaker Software	Lebanon Public Schools, NH
Cheryl Santagate (Elms, '86)	Lawrence Public Schools	IBM	Nashoba Reg. Schools
Christine Truong (UMASS, '85)	Lawrence Public Schools	Hewlett- Packard	Boston Public Schools

MESTEP CLASS OF 1988

Mary Anderson (SUNY/Bing '83)	Lawrence Public Schools	DEC	Lowell Public Schools
Daria Anes (Regis '84)	Lawrence Public Schools	DEC	Falmouth Public Schools

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
MaryBeth Borkowski (Notre Dame '87)	Lawrence Public Schools	IBM	Center HS, Kansas City, MO
Pam Brown (Bowdoin '84)	Lawrence Public Schools	Houghton Mifflin	Falmouth Public Schools
Steve Chamberlin (Springfield '87)	Franklin Public Schools	Prime	Holliston Public Schools
Kim Chereshkoff (Manhattanville '87)	Nashoba Regional Schools	New England Telephone	Gloucester Public Schools
Stephanie Clark (Clark College '85)	Cambridge Public Schools	Bank of Boston	Chicago Public Schools
Susan Cole (Smith '87)	Franklin Public Schools	Barry Wright	Holyoke Catholic HS
Edward Donahue (UMass '87)	Concord Public Schools	DEC	Pelham HS, NH
David Henry (N. Dakota St '85)	Acton Public Schools	DEC	Brighton High School, NY
Thomas Herman (Columbia '87)	Boston Public Schools	Millipore	The Heights School, MD
Kathleen Holwell (UMass '87)	Lawrence Public Schools	New England Telephone	Quabbin Reg. High School
Tony LaMontagne (UMass '82)	Greenfield Public Schools	IGS-GM	Writing grant in health ed.
Steve McCloskey (Alma '81)	Lawrence Pubic Schools	IBM	Pelham HS, NH
Alana Parkes (Earlham '87)	Cambridge Friends School	DEC	Undecided
Nestor Rivera (Clark U. '83)	Worcester Public Schools	Prime	Worcester Public Schools

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>	<u>Current Employment 1988</u>
Yvette Ross (Hampton '87)	Boston Public Schools	Millipore	Albany Law School, NY
Cleveland Smith (Morehouse '86)	Lawrence Public Schools	New England Telephone	Asheville, NC Public Schools
Ron Spicer (UNH '87)	Lawrence Public Schools	New England Telephone	Williamsburg, VA Public Schools
Carol Stewart (Framingham St '87)	Nashoba Regional Schools	IGS-GM	Narragansett Regional HS
Doug Walsh (Franklin & Marshall '87)	Acton-Boxborough Regional Schools	DEC	Hebron Academy, ME

MESTEP CLASS OF 1989

Cay Agostino (Notre Dame '87)	Westford Public Schools	Museum of Science
Cecilia Belmont (Lock Haven '88)	Westford Public Schools	DEC
Adrienne Petti (UC/Berkeley '88)	Lawrence Public Schools	Bank of Boston
Cynthia Bridges (Clark '83)	Boston Public Schools	Millipore
Nanette Burque (Bellarmine '84)	Franklin Public Schools	Analog Devices
Letoynia Collier (Notre Dame '88)	Boston Public Schools	IBM
Patrick Curry (UC/Irvine '79)	Lawrence Public Schools	DEC
K. DeMeulemeester (Dartmouth '88)	Westford Public Schools	DEC
James Gomes (Soeast Mass '88)	Lawrence Public Schools	GTE

<u>Graduate</u>	<u>School Internship</u>	<u>Industry Internship</u>
Addison Goodell (Miami U. '80)	Framingham Public Schools	Hewlett Packard
Themba Gumede (Wittenberg '87)	Franklin Public Schools	Houghton-Mifflin
Ann Healy (Boston '87)	Norwell Public Schools	IBM
Azania Heyward-Robinson (Spelman '86)	Boston Public Schools	GTE
Sharon Hubbard (Clark '88)	Brookline Public Schools	New England Telephone
Laurie James (Univ of Pacific '88)	Lawrence Public Schools	Hewlett Packard
Paul Karasch (Wabash '78)	Lawrence Public Schools	New England Telephone
Diane Leary (Harvard '81)	Lawrence Public Schools	IGS-GM
Brenda McMillan (Clark '88)	Westford Public Schools	Millipore
Karen Samulesen (MIT '81)	Lawrence Public Schools	IGS-GM
Andrew Sapp (Yale '88)	Lawrence Public Schools	New England Telephone
James Schultz (Evergreen St '88)	Framingham Public Schools	DEC
Chanrithy Uong (Boston U '87)	Lowell Public Schools	Houghton-Mifflin
Caren Walker (UMASS '88)	Boston Public Schools	New England Telephone

PROGRAM DESIGN

In 1983 the Math English Science Technology Education Project (MESTEP) was established to recruit, select, prepare, place, support, and retain in teaching diverse and talented recent college graduates with strong academic majors in math, English, or a science. A collaborative partnership involving the University, public schools, and private industry, has enabled the development and operation of a program design which has proven attractive to, and effective in preparing, the target population.

MESTEP is a 15 month M.Ed. program which uses resources from several areas. The program begins during the summer with approximately 3.5 weeks of intensive education course work drawing on the strengths of the faculty and facilities at the University of Massachusetts. After completing initial course work, MESTEP students move to a summer school, currently the Acton-Boxborough High School, where they work in conjunction with mentors and university supervisors as student teachers for the summer school.

Successful completion of the first summer prepares people to move into a teaching internship and an industry internship. School systems hire two interns to fill a year-long vacancy. Each internship lasts for approximately one semester, with half the interns starting in schools, the other half in industry, and all switching at mid-year.

As a teaching intern a MESTEP student is employed by a school system to assume most of the responsibilities of a full-time teacher. Throughout the internship the intern has the support of an on-site cooperating teacher and a University supervisor. MESTEP students also participate in a seminar with the other MESTEP teaching interns. The focus of the seminar is the work of the teacher, and it provides a forum to discuss problems, to receive advice, and to share feelings with other beginning teachers and a facilitator.

The industry internship involves working in a full-time position at one of the cooperating companies. Most internships are in human resource development, curriculum development, or training units of large corporations. Internships are designed to provide our prospective teachers with perspectives on how companies work, how they train or educate, and how they apply technology in these processes. In addition to the work of the internship, the intern also participates in two classes with the other industry interns: "The Impact of Computers on Schools and Society" and "Adolescent Growth and Development."

During the final summer of the program, MESTEP students return to Acton for five weeks of intensive course work to complete the Masters degree and certification requirements. The summer provides an opportunity for the group to discuss the concerns, challenges, and ideas of beginning teachers, and to meet the new group of candidates who are starting student teaching. It is also an opportunity to add to and share the resources that the interns accumulated during their internships, to expand knowledge about educational software, and to complete job searches for September. The final summer is both an ending and a beginning.

During the first three years of teaching, participating companies commit to attempt to hire MESTEP graduates for summer employment.

When compared with other teacher education program designs, the following are distinctive features:

- the school-industry-University partnership
- the group interview/partnership selection process
- use of the candidate cohort as a resource throughout the 15 months
- student teaching in teams in a single site
- paid school and corporate internships
- employment of 2+ experienced teachers as program staff for each intern
- equity and technology themes
- summer employment options for graduates

Within the University's School of Education, MESTEP is affiliated with the Secondary Teacher Education Program (STEP) whose faculty and courses provide core certification courses and experiences for MESTEP candidates. MESTEP also works in close collaboration with the Schools's Staff Development and Media and Technology Concentrations.

MESTEP
15 Month Program of Study

MESTEP continues to be an experimental program. The following is a current rendition.

First Summer (15 credits)

- o June -in Amherst (arrival in Amherst, first Sunday in June)
 - Teacher Education Courses
 - pre-June school visits
 - Educ I524: Work of the Middle and High School Teacher
 - Educ I534: Instructional Planning & Assessment
 - Educ I509, 511, or 512: Math, English, or Science Teaching
 - Microteaching
 - Cohort Group Building
 - Living together in a rented sorority house
- o July-August (at Acton High School: July 1-August 12)
 - Teamed Student Teaching
 - Educ I500S or M: Work with Mentors, Supervisors
 - Educ I501Y: Peer Seminars

Academic Year (Sept.-June) (12 credits each semester)

- o School Internship (Fall or Spring)
 - Educ I500S or M: Full-time paid teaching internship
 - On-Site Support and Supervision
 - Seminars with other MESTEP teaching interns
- o Industry Internship (Fall or Spring)
 - Educ I698J: Full-time paid industry internship
 - Educational Implications of New Technologies
 - Two evening courses
 - Educ I692W: Implications of Computers on Schools and Society
 - Educ I693P: Adolescent Growth and Development

Second Summer (12 credits)

- o July-August (at Acton High School)
 - Final four courses for M.Ed. and Certification
 - Educ I591M: Cultural Understanding
 - Educ I615: Workshop in Education
 - Educ I625: Staff Development: Plans and Procedures
 - Educ I691: Using Software in Secondary School

PARTNERSHIP PARTICIPANTS

The MESTEP Partnership

Planning Board Members

Faculty

Staff

Mentors

Support Teachers

Supervisors

School Internship Sites

Industry Internship Sites

Graduate Employers

THE MESTEP PARTNERSHIP

From the outset, MESTEP was designed with the premise that a school-university-business partnership was essential to accomplish the recruitment, selection, preparation, placement and retention goals identified. This premise has been reinforced by experience.

The MESTEP Planning Board sets broad goals and agendas within which all constituents work. It also provides advocacy for the program. Administrative coordination is the responsibility of the Program Director at the School of Education, University of Massachusetts/Amherst.

The following pages summarize people from schools, the University, and corporations who have played important roles in making MESTEP work. They are the partnership.

MESTEP PLANNING BOARD MEMBERS

1983-1988

(* indicates current member)

(f indicates founding member)

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Furcolo Hall
University of Massachusetts
Amherst, MA 01003

PARTICIPATING MESTEP FACULTY
1983-1988

<u>Faculty Member</u>	<u>Course Title</u>
Virginia Bastable, Portia Elliott, Michael Froning	Teaching Mathematics in the Middle and High School
Cristina Basave-Davy, John Fischetti, Les May, Howard Spielman	Impact of Computers on Schools and Society
Richard Clark, Klaus Schultz	Educational Implications of New Technologies
William Fanslow	Microteaching Staff Development: Plans & Procedures
Jack Hruska	Adolescent Growth and Development
Barbara Love	Education for Cultural Understanding
William Masalski, Alan November, Klaus Schultz	Seminar: Using Software
Linda Miller-Cleary	Language in the Middle and High School Classroom
Helen Schneider	Education for Cultural Understanding
Earl Seidman	Work of the Middle and High School Teacher Teaching English in Middle and High School Workshop in Education
Leverne Thelen	Instructional Planning and Assessment Teaching Science in the Middle and High School The Teacher in the Middle and High School
William Verman	Staff Development: Plans & Procedures

MESTEP STAFF
1983-1988

Cindy Aghayan	Work Study Assistant, 1986
Nancy Carroll	Work Study Assistant, 1986
John DiIorio	Teaching Supervision Coordinator, 1986-1988
Chris Emery	Teaching Supervision Coordinator, 1986-1988
John Fischetti	Administrative Coordinator, 1985-1988
George Frost	Summer School Director Acton, 1985-present
Mary Beth Gallant	Work Study Assistant, 1987
Stephen Grizzell	Research Assistant, 1984-1985
Eric Heller	Research Assistant, 1984-1985
Leslie Hendricks	Work Study Assistant, 1984-1985
Sandy Horne	Work Study Assistant, 1985-1986
Barbara Jordon	Research Assistant/Recruitment, 1985
Claudette Kiely	Administrative Coordinator, 1984-1985
Lynn Kirk	Research Assistant 1986
Erica Krager	Work Study Assistant 1987
Donna LaLonde	Administrative Coordinator 1987-present
William Maguire	Research Assistant 1984-1985
Robert Mastorakis	Work Study Assistant 1986-present
Michael Morgan	Research Assistant, 1986
Philip Nelson	Research Assistant, 1984-1985
Charles Pettirossi	Work Study Assistant, 1987
Adam Rockman	Work Study Assistant, 1988-present
Sharon Santilli	Research Associate, 1986-1988
Laura Scarborough	Work Study Assistant, 1984-1985
Mary Schatzkamer	Research Associate, 1985-1986
Carol Shea	Coordinator of Supervision, 1988-present
Deborah Sheehy	Research Assistant, 1988
Debi Smith	Administrative Assistant, 1983-1985
Nancy Tamms	Administrative Assistant, 1986-present
Jill Ullian	Research Assistant, 1987-1988
Joan Zabawa	Administrative Assistant, 1984

MESTEP MENTORS
1983-1988

MESTEP mentors are jointly employed by the summer school and MESTEP to work on daily basis with the interns to plan, problem solve, evaluate, and support progress during the intern's summer student teaching experience.

Lynn Austin (1983)	Lexington Public Schools
Steven Foster (1983)	Acton-Boxboro Regional Schools
Bert Hubley (1983)	Acton-Boxboro Regional Schools
Lawrence Iamello (1983)	Somerville Public Schools
Barbara Laramie (1983)	Lexington Public Schools
Richard Raczkowski (1983)	Lexington Public Schools
Edward Stuhr (1983)	Lexington Public Schools
George Taliadouros (1983)	Lexington Public Schools
Richard Thibeault (1983)	Lexington Public Schools
Catherine Capone (1983-1984)	Acton-Boxboro Regional Schools
Edward Chapdelaine (1983-1984)	Lexington Public School
Donald DiFelice (1983-1984)	Lexington Public Schools
William Betoumey (1985-1988)	Acton-Boxboro Regional Schools
Rosemary Dow (1985-1988)	Acton-Boxboro Regional Schools
Dennis Kavanagh (1985-1988)	Acton-Boxboro Regional Schools
William Noeth (1985-1988)	Acton-Boxboro Regional Schools
Salvatore Trento (1983-1988)	Carlisle Public Schools

MESTEP SUPPORT TEACHERS **1983-1988**

Support teachers are nominated by the school and employed by MESTEP to provide constructive criticism and evaluation through in-class observation, to help with problems and questions, and to acclimate the intern to the school environment.

Nancy Allison	Pentucket Regional Schools
David Avedian	Nashoba Regional Schools
Rachel Bartlett	Hopkinton Public Schools
Cliff Brooks	Gloucester Public Schools
John Callahan	Concord-Carlisle Public Schools
Catherine Campe	Acton-Boxborough Regional Schools
Al Carlin	Quabbin Regional Schools
Ed Colace	Amesbury Public Schools
Domenic Compagnone	Franklin Public Schools
William Compagnone	Lawrence Public Schools
Richard Conway	Winchester Public Schools
Marguerite Coupal	Springfield Public Schools
Thomas Crossman	Nashoba Regional Schools
James Dadoly	Acton-Boxborough Regional Schools
David Daniels	Longmeadow Public Schools
William Donovan	Amesbury Public Schools
William Downey	Marlborough Public Schools
Pat Driscoll	Lawrence Public Schools
MaryEllen Duffy	Newburyport Public Schools
Pauline Duhamel	Lawrence Public Schools
Chris Emery	Amherst-Pelham Regional Schools
Steven Foster	Acton-Boxborough Regional Schools
Ronald Gaumond	Harvard Public Schools
H. Ward Gay	Cambridge Public Schools
Henry Goldman	Norwell Public Schools
Alan Gorfin	Longmeadow Public Schools
Randi Hallarman	The Gifford School
Clint Hanslom	Springfield Public Schools
Mary Alice Hantout	Boston Public Schools
William Horner	Framingham Public Schools
Richard Houde	Weston Public Schools
Marjorie Hobbs	Mount St. Mary Seminary
John Hubbard	Lexington Public Schools
Bert Hubley	Acton-Boxborough Regional Schools
Karen John	Boston Public Schools
Robert Kennedy	Westford Public Schools
John Kudukey	Greenfield Public Schools
George Larson	Easton Public Schools

Maureen Marshall
Robert McDermott
Suzanne McGrail
James McGuirk
Elena Menize
W. Pike Messenger
Marguerite Murphy
Sr. Mary Murphy
David Parfitt
Melvin Pollack
Neil Potter
Mary Riordan
Nancy Santeusanil
Todd Smith
Douglas Stather
Thomas Stanley
Karen Tucker
Debbie Stone
Richard Throne
Karen Tucker
Maureen White
Robert Wiggin
Gary Wise

Quabbin Regional Schools
Framingham Public Schools
Westford Public Schools
Worcester Public Schools
Franklin Public Schools
Triton Regional Schools
Lawrence Public Schools
St. Gregory School
Brookline Public Schools
Pentucket Regional Schools
Mohawk Trail Regional Schools
Holy Name Central School
Lynnfield Public Schools
The Gifford School
Wayland Public Schools
Harvard Public Schools
Narragansett Regional Schools
Boston Public Schools
Winchester Public Schools
Narragansett Regional Schools
Boston Public Schools
Brookline Public Schools
Murdock Public Schools

MESTEP SUPERVISORS
1983-1988

MESTEP supervisors are selected and employed by the University to guide the development of the teaching intern through the school internship experience and to fulfill state certification requirements by making regular visits to observe classes and to meet with support teachers and interns.

Virginia Bastable	Amherst-Pelham Regional Schools
William Betourney	Acton-Boxborough Regional Schools
Dorothy Bratiotis	Worcester Public Schools
Carole Camp	University of Massachusetts
Charles Camp	Amherst-Pelham Regional Schools
A' Carlin	Quabbin Regional Schools
Margaret Collins	Oxford Public Schools/MESTEP Graduate
Marilyn Corsini	Boston Public Schools
Thomas Crossman	Nashoba Regional Schools
David Daniels	Longmeadow Public Schools
John DiIorio	Greenfield Public Schools
Pauline Duhamel	Lawrence Public Schools
Rosemary Dow	Acton-Boxborough Regional Schools
Chris Emery	Amherst-Pelham Regional Schools
Michael Froning	Amherst-Pelham Regional Schools
Alan Gorfin	Longmeadow Public Schools
Jerry Howland	Boston Public Schools
Dennis Kavanagh	Acton-Boxborough Regional Schools
John Kudukey	Greenfield Public Schools
Barbara Laramie	Lexington Public Schools
Susan Latham	University of Massachusetts
Julie Matzel	University of Massachusetts
Cathy McDonagh	Nashoba Regional Schools/MESTEP Graduate
John McDonough	University of Massachusetts
Dennis McGeary	Dudley Charlton Regional Schools
Marguerite Murphy	Lawrence Public Schools
William Noeth	Acton-Boxborough Regional Schools
Alan November	Wellesley Public Schools
Kevin O'Malley	Franklin Public Schools
Jack Philips	University of Massachusetts
Karen Poulin	Landmark School/MESTEP Graduate
Helen Schneider	University of Massachusetts
Margaret Schofield	Acton-Boxborough Regional Schools
Claire Sheff	Norwell Public Schools
Richard Stickle	Quabbin Regional Schools
Salvatore Trento	Concord-Carlisle Regional Schools
John J. Walsh	Easton Public Schools
Kenneth Weinstein	Tufts University
Frank Zak	Mohawk Trail Regional Schools

SCHOOL INTERNSHIP SITES
1983-1988

ACTON-BOXBOROUGH REGIONAL SCHOOLS, ACTON, MA
AMESBURY PUBLIC SCHOOLS, AMESBURY, MA
AMHERST-PELHAM REGIONAL SCHOOLS, AMHERST, MA
BOSTON PUBLIC SCHOOLS, BOSTON, MA
BROOKLINE PUBLIC SCHOOLS, BROOKLINE, MA
CAMBRIDGE PUBLIC SCHOOLS, CAMBRIDGE, MA
CONCORD-CARLISLE REGIONAL SCHOOLS, CONCORD, MA
DUDLEY-CHARLTON REGIONAL SCHOOLS, DUDLEY, MA
EASTON PUBLIC SCHOOLS, EASTON, MA
FRAMINGHAM PUBLIC SCHOOLS, FRAMINGHAM, MA
FRANKLIN PUBLIC SCHOOLS, FRANKLIN, MA
THE GIFFORD SCHOOL, WESTON MA
GLOUCESTER PUBLIC SCHOOLS, GLOUCESTER, MA
GREENFIELD PUBLIC SCHOOLS, GREENFIELD, MA
HARVARD PUBLIC SCHOOLS, HARVARD, MA
HOPKINTON PUBLIC SCHOOLS, HOPKINTON, MA
HOLY NAME, WORCESTER, MA
LAWRENCE PUBLIC SCHOOLS, LAWRENCE MA
LEXINGTON PUBLIC SCHOOLS, LEXINGTON, MA
LONGMEADOW PUBLIC SCHOOLS, LONGMEADOW, MA
LYNNFIELD PUBLIC SCHOOLS, LYNNFIELD, MA
MARLBOROUGH PUBLIC SCHOOLS, MARLBOROUGH, MA
MOHAWK TRAIL REGIONAL SCHOOLS, SHELBURNE FALLS, MA
MOUNT ST. MARY'S, NASHUA, NH
MURDOCH PUBLIC SCHOOLS, MURDOCH, MA
NARRAGANSETT REGIONAL SCHOOLS, OTTER RIVER, MA
NASHOBA REGIONAL SCHOOLS, BOLTON, MA
NEWBURYPORT PUBLIC SCHOOLS, NEWBURYPORT, MA
NORWELL PUBLIC SCHOOLS, NORWELL, MA
PENTUCKET REGIONAL SCHOOLS, WEST NEWBURY, MA
QUABBIN REGIONAL SCHOOLS, BARRE, MA
ST. GREGORY'S HIGH SCHOOL, DORCHESTER, MA
SPRINGFIELD PUBLIC SCHOOLS, SPRINGFIELD, MA
TRITON REGIONAL SCHOOLS, BYFIELD, MA
WAYLAND PUBLIC SCHOOLS, WAYLAND, MA
WESTFORD PUBLIC SCHOOL, WESTFORD, MA
WESTON PUBLIC SCHOOLS, WESTON, MA
WINCHENDON PUBLIC SCHOOLS, WINCHENDON, MA
WINCHESTER PUBLIC SCHOOLS, WINCHESTER, MA
WORCESTER PUBLIC SCHOOLS, WORCESTER, MA

MESTEP INDUSTRY INTERNSHIP SITES
1983-89

ANALOG DEVICES
BANK OF BOSTON
BARRY WRIGHT
CULLINET SOFTWARE
DATA GENERAL
DIGITAL EQUIPMENT
GENERAL MOTORS (THROUGH THE UMASS
INSTITUTE FOR GOVERNMENTAL SERVICES)
GENERAL TELEPHONE & ELECTRIC
HEWLETT PACKARD
HOUGHTON-MIFFLIN
IBM
MILLIPORE
MUSEUM OF SCIENCE
NEW ENGLAND TELEPHONE
PRIME COMPUTER
SPINNAKER SOFTWARE

MESTEP works in conjunction with the:
Massachusetts High Technology Council
Boston Private Industry Council

MESTEP GRADUATE EMPLOYERS
1983-1988

Acton-Boxborough Regional Schools
Algonquin Regional Schools
American School, The Netherlands
Amherst-Pelham Regional Schools
Ashville Public Schools, NC
Atlanta Public Schools, Atlanta, GA
Boston Public Schools
Brighton High School, NY
Brockton Public Schools
Brownsville Public Schools, Brownsville, TX
Brookline Public Schools
Burlington Public Schools
Catholic School, ME
Center High School, Kansas City, MO
Cherry Creek Public Schools, CO
Chicago Public Schools, IL
Concord-Carlisle Regional Schools
Eaglebrook School
Easton Public Schools
Edward Brookline Public Schools
Falls Church Public Schools, Falls Church, VA
Falmouth Public Schools
Framingham Public Schools
Full Circle Alternative High School
Galway Public Schools, NY
The Gifford School
Gill-Montague Regional Schools
Gloucester Public Schools
Hanover Public Schools
Harvard Public Schools
Hebron Academy, ME
The Heights School, MD
Heritage High School, VA
Hill School, Pottstown, PA
Hingham Public Schools
Holyoke Catholic High School
Hopkinton Public Schools
Landmark School, Gloucester, MA
Lawrence Public Schools
Lebanon Public Schools, Lebanon, NH
Lenape Valley High School, NJ
Lenox Public Schools
Longmeadow Public Schools

Lowell Public Schools
Manhattan Center for Math & Science, NY
Maple Valley School
Masconomet Regional Schools
Maywood Public Schools, IL
Mohawk Trail Regional Schools
Nantucket Public Schools
Narragansett Regional Schools
Nashoba Regional Schools
Needham Public Schools
Newburyport Public Schools
Norwell Public Schools
Our Lady of Lourdes High School, Poughkeepsie, NY
Oxford Public Schools
Pelham High School, NH
Plymouth-Carver Regional Schools
Prince Frederick Public Schools, MD
Quabbin Regional Schools
Reading Public Schools
Richmond Public Schools, Richmond, VA
Rockland Public Schools
Scituate Public Schools
Silver Creek Public Schools, San Jose, CA
Springfield Public Schools
St. Dunstan's School, St. Croix, USVI
St. Peter's Marian High School
Triton Regional Schools
Turners Falls Public Schools
Valley View School
Vernon Public Schools, Vernon, CT
Walnut Hill School for Performing Arts
Watertown Public Schools
Wayland Public Schools
West Covina High School, CA
Weston Public Schools
Wheaton Public Schools, Wheaton, IL
Williamsburg Public Schools, VA
Wilmington Public Schools
Winchester Public Schools

RECOGNITION AND PUBLICITY

RECOGNITION

Over its six year history, MESTEP has received recognition for its work from a variety of sources. Numerous articles about the program have appeared in newspapers and magazines. Faculty and staff in the program have authored articles for journals, and given presentations about the program and the research project at numerous professional conferences. (Lists of all of the above follow.)

In the past two years MESTEP has been the recipient of two awards. In February 1987, MESTEP received the DISTINGUISHED ACHIEVEMENT AWARD IN TEACHER EDUCATION from the American Association for Colleges of Teacher Education. In May 1988, MESTEP was recognized as one of six EXEMPLARY INDUSTRY-EDUCATION PARTNERSHIPS by the Commonwealth of Massachusetts Board of Education.

PROFESSIONAL CONFERENCES

School of Education faculty, representatives of the Planning Board from industry and schools, MESTEP graduates, and the MESTEP Research Group have made presentations at state and national professional conferences including:

American Association of Colleges of Teacher Education
American Association of School Administrators
American Educational Research Association
Association for Supervision and Curriculum Development
National Science Teachers Association
National Council of Teachers of Mathematics
Massachusetts Association of School Committees
National Association of Physics Teachers
Massachusetts Teachers Association

ARTICLES BY MESTEP FACULTY, STAFF, AND PARTNERS

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- Clark, R., Johnson, R., Kessler, R., & Schultz, K. (1984 November-December). Recruiting talent into public school teaching: an Analysis from one successful pilot program. Journal of Teacher Education, p. 2-4.

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- Cadwallader, L. (1986, November). Math English Science Technology Education Project. Dynamic Connections for Learning--The Future of School/Business Partnerships, pp. 14-15.
- Stipp, D. (1986, November 11). Teaching teaching. The Wall Street Journal, pp. 1,29.
- Wakefield, J. (1986, October 2). Program lures grads to teach. Lawrence-Eagle Tribune. p. 24.
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- Efron, S. (1986 August 5). Schools look for new talent. Lawrence Eagle Tribune.
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- Stanne, P. (1986 Summer). Former high points editor teaching math. High Points.
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RESEARCH AND EVALUATION

THE MESTEP RESEARCH PROJECT

Over the past three years, MESTEP has been conducting a research project based on in-depth phenomenological interviews, with a sample of 30 participants in and graduates of the program. The research represents a continuing effort to understand students' experiences as new teachers for purposes of program development and dissemination.

MESTEP conducted three 90-minute interviews with each of the participants in the research project. In the first interview, the researcher asked the participants to reconstruct the autobiographical context of their lives which led to their involvement in MESTEP. The second interview centered on the participant's current experience as a beginning teacher. In the third interview, participants were asked to reflect on the meaning of their experience in MESTEP and to talk about how they understood and made sense of their beginning years as teachers.

All interviews were tape recorded and later transcribed by a secretary. Once the transcripts were typed, the research team¹ read the transcripts and marked and labeled compelling passages. These passages have been organized, excerpted, and stored in 80 "theme files" which represent a continuing data base for MESTEP research and development.

As the research team met periodically to discuss their reading of the transcripts, they also selected several interviews which were particularly rich in compelling material and illustrative of the complexities of beginning teaching to be developed into profiles. Building on the method of presentation employed in In the Words of the Faculty (Seidman, 1985), we have developed profiles as narratives of the participants' experiences in their own words. To date we have 13 profiles available for use as informational and instructional material on what it is like to be a beginning teacher.

EVALUATION

The research effort is not primarily designed for evaluation. However, information gained through the transcripts has been important in reshaping the program's components and experiences. Student feedback is gathered through course evaluations and written project evaluations at the end of the first summer and upon completion of the program. Results of the process led to the re-ordering of the courses during the teaching semester, expanded administrative services, revamping of several courses and the support seminar, and provision of more pleasant living quarters at the University during the first summer's coursework.

Each grant sponsor through its approval process has evaluated both the merit and potential of MESTEP. The most important evaluations, to date, have come from the industry and school supervisors who work with MESTEP students. Their feedback has shown that the work of our students is respected and that the affiliations made by students and those associated with the program have helped improve schools.

¹The MESTEP research project was directed by Earl Seidman. The research team was composed of MESTEP faculty and staff and included: Richard J. Clark, Director, John Fischetti, Sharon Sautilli, Mary Schatzkamer, Klaus Schultz, Earl Seidman, and Verne Thelen. Research was supported through a grant from the Fund for the Improvement of Post Secondary Education.

FISCAL INFORMATION

RESOURCES

Support for basic program operations is currently provided by the University through allocations from the University President, the School of Education, and a portion of student fees.

Basic Revenue

Student Fees	62,000	
University President	30,000	
School of Education	30,000	
		122,000

Basic Expenses

Administration & Recrtmt	30,000	
Internship Coordinator	8,000	
Univ. Faculty (summer)	27,000	
School Faculty (summer)	26,000	
Support Teachers & Supervisors	19,000 + 6,000	
Microteaching Kids	2,000	
Travel	4,000	
		122,000

Grants and contracts have played critical roles in program development, research and evaluation, and recruitment and dissemination. They include:

1988-89	Digital Equipment Corporation grant of VAXMate PC's, MicroVaxes, and related hardware and software to support networking, training, and research and development	229,200
1987-89	Title II (Board of Regents) to support minority fellowships and related recruitment	66,500
1985-88	Fund for the Improvement of Post Secondary Education (FIPSE) to support program development, research, and dissemination	237,300
1984-85	Bay State Skills Corporation to support program operation and development	106,400
1983-	Digital Equipment Corporation grant of 25 Robin computers for use by students and faculty	(est) 50,000

689,400

Internships provide not only the educational experience but also the student financial support necessary to allow recruits to participate. Estimated student support through schools and corporations is:

	<u>n</u>	<u>mean</u>	
1988-89	23	20,000	460,000
1987-88	21	19,000	399,000
1986-87	22	18,000	396,000
1985-86	16	17,000	272,000
1984-85	24	17,000	408,000
1983-84	17	17,000	289,000

2,224,000

Participating schools and corporations continue to contribute significant resources and support to MESTEP in a variety of ways. A sample includes:

Acton Public Schools: providing both summer school and academic year teaching space.

Bank of Boston: sponsoring banquet tables and hosting receptions.

Boston Private Industry Council: hosting meetings and providing linkages with member organizations.

Concord Public Schools: hosting informational meetings for school superintendents; distributing recruitment materials during national recruitment trips.

Digital Equipment Corporation: hosting twelve interview days, to date involving 1000+ participants; sponsoring receptions and banquet tables; supporting recruitment trips; providing training sessions for all students.

Lawrence Public Schools: hosting the Governor's visit to MESTEP; sponsoring meetings and receptions for interns; employing 33 MESTEP students as interns.

Massachusetts High Technology Council: sponsoring banquet tables and co-hosting commencement receptions; providing advocacy, links, and meetings with prospective corporate participants.

New England Telephone: providing hotel rooms for candidates; sponsoring banquet tables; donating classroom space for seminars at the Learning Center.

PERSPECTIVES: A SAMPLER*

"When I first went to college a lot of people were making comments like 'Don't waste your time going to school to become a teacher' I got that from a lot of people."

"I saw an article in the Globe about MESTEP. My family called me about it. It was just heaven-made for me."

"It was the toughest summer I ever lived through. The intensity of the program, the time you had to devote. I would get home and I would be exhausted."

"Acton was fantastic... It saved us all."

"The first day of teaching, it was hard. I was really nervous. But since I had no choice I just figured, well, it has to be done. It was not too bad."

"I was nervous the first day, my hands were sweating, and I was talking too fast, and I was telling them what I was going to accept and I was still not sure that I was going to accept these things."

"I suppose my views changed a hundred times in the last year, and September and October were hell. I was not doing very well and I hated discipline. I would think, well, I will quit. Now I have definitely gotten the hang of it."

"I don't believe in the tracking system."

"I feel that I work all the time - 60 hours a week- and then on the weekends."

"Cafeteria duty is the pits. Those kind of things start to add up after awhile. But right now the good is outweighing the bad."

"I wish I had more personal freedom. That was what was nice working at Digital. I was treated as responsible. It was nice to go to a clean building, take 45 minutes for lunch, being able to relax. The change of pace was really nice. You could be by yourself, not on stage seven periods a day."

"MESTEP group support was solid. Being with the people was great. If you are in trouble you could go and talk, and they would really listen and care."

"My next steps are being able to control the class subconsciously and being more creative in how I present material--two ways, three ways, four ways, so if they can't understand it one way they can another way."

"Teaching is pretty much my life....I don't think I'm going to change the world; I hope I change one or two students lives."

*From interviews (See page 44)

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